

further rejected claims 15-22 under 35 U.S.C. § 102 (e) as being anticipated by Parulski, Silverman et al., and Taguchi.

Applicants have cancelled claims 15-22 and have added new claims 23-30 for examination.

The references the Examiner has cited do not disclose or teach the device and method recited in new claims 23-30.

Dakin et al. discloses an apparatus and method for recording and reproducing a plurality of audio messages together with video data. Initial data address signals are combined with corresponding audio messages so that a selected message is accessed along with selected video data. In playback, the address and audio data signals are retrieved from the recording medium and stored. The address signals are utilized to access selectable messages for decoding and playback with selected video data.

However, the cited reference does not disclose, as recited in claim 23, inter alia, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit, including a signal processor for receiving the plurality of audio signals, extracting the indicating information, and separating at least one of the plurality of audio signals based on the extracted indicating information; and a controller coupled to the signal processor, to compare presentation time information of the separated signal to a synchronizing signal generated from the controller, and thereby to control presentation time of the separated

signal, wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection.

In contrast, Dakin et al. discloses applying the audio signal on line 14 to an audio data recovery circuit which recovers digitally encoded audio data as a serial bit stream at logic level from the audio signal on line 14. The encoded audio data is applied as an output on line 38 to a conventional serial to eight-bit parallel converter, which converts the serial stream of encoded audio data on line 38 into eight-bit parallel data, which is applied to the control circuit 28 on line 43 (col. 6, lines 40-48).

Dakin et al. does not disclose, inter alia, as recited in claim 23, each audio sector interleaved as a predetermined unit, and further does not disclose each sector corresponding to the plurality of audio signals sequentially recorded on the medium between sectors of the video signal. This reference further does not teach or disclose a controller controlling the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection. As such, claim 23 is patentable over Dakin et al.

Claim 23 is patentable over Taguchi as Taguchi does not disclose or teach the elements recited in new claim 23.

Taguchi discloses a recording and/or reproducing apparatus for recording an audio signal and a video signal corresponding to the audio signal on a recording medium simultaneously and/or reproducing the audio signal and the video signal from

the recording medium simultaneously wherein the apparatus records the video signal with a signal indicative of the recorded area of the corresponding audio signal.

However, the cited reference does not disclose, as recited in claim 23, inter alia, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit, including a demodulator for demodulating the digital signal to restore original signal; a signal processor for receiving the plurality of audio signals, extracting the indicating information, and separating at least one of the plurality of audio signals based on the extracted indicating information; and a controller coupled to the signal processor, to compare presentation time information of the separated signal to a synchronizing signal generated from the controller, and thereby to control presentation time of the separated signal, wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection.

In contrast, Taguchi teaches the data signal recorded at a predetermined position on the track, and the arrangement of data when the data signal is time-serially arranged as shown in Fig. 2. As shown in Fig. 3, one-bit signal representing whether the video signal is to be recorded at one field unit or at one frame unit is recorded on b.

A six-bit signal representing the recording track number is recorded on x. A nineteen-bit signal representing the data is recorded on d. A one-bit signal representing whether the signal recorded on the track is a video signal or an audio signal is recorded on e. A signal representing whether there is present an audio signal or a video signal corresponding to the video or audio signal recorded on this track is recorded on f (Fig. 3; col. 4, lines 2-26)

Taguchi does not teach or disclose, inter alia, as recited in claim 23, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit, including a signal processor for receiving the plurality of audio signals, extracting the indicating information, and separating at least one of the plurality of audio signals based on the extracted indicating information and a controller coupled to the signal processor, to compare presentation time information of the separated signal to a synchronizing signal generated from the controller, and thereby to control presentation time of the separated signal, wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection. As such, claim 23 is patentable over Taguchi.

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Claim 23 is patentable over Parulski as Parulski does not disclose or teach the elements recited in new claim 23.

Parulski teaches an apparatus and method for use with a system including a digital database for storing digitized images and digitized audio messages for controlling concurrent reproduction of digitized images on an image reproduction device and audio information on a sound reproduction device.

However, Parulski does not teach or disclose, as recited in claim 23, inter alia, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit, including a demodulator for demodulating the digital signal to restore original signal; a signal processor for receiving the plurality of audio signals, extracting the indicating information, and separating at least one of the plurality of audio signals based on the extracted indicating information; and a controller coupled to the signal processor, to compare presentation time information of the separated signal to a synchronizing signal generated from the controller, and thereby to control presentation time of the separated signal, wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection.

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In contrast, Parulski teaches digitized images stored as image data files in the digital database and audio data files in the data base where the audio messages and images are associated with each other by means of a presentation sequence file stored in the data base or in a separate EEPROM memory.

Parulski does not teach or disclose, inter alia, as recited in claim 23, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit, including a signal processor for receiving the plurality of audio signals, extracting the indicating information, and separating at least one of the plurality of audio signals based on the extracted indicating information and a controller coupled to the signal processor, to compare presentation time information of the separated signal to a synchronizing signal generated from the controller, and thereby to control presentation time of the separated signal, wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection. As such, claim 23 is patentable over Parulski.

Claim 23 is patentable over Kim as Kim does not disclose or teach the elements are recited in claim 23.

Kim discloses a mixed simulcast circuit in which the voice signal demodulated in the voice demodulator through the tuner and the voice signal from the outside can be recorded on the recording medium according to the user's desire.

However, Kim does not disclose or teach or disclose, as recited in claim 23, inter alia, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit, including a demodulator for demodulating the digital signal to restore original signal; a signal processor for receiving the plurality of audio signals, extracting the indicating information, and separating at least one of the plurality of audio signals based on the extracted indicating information; and a controller coupled to the signal processor, to compare presentation time information of the separated signal to a synchronizing signal generated from the controller, and thereby to control presentation time of the separated signal, wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection.

In contrast, Kim discloses in reproduction mode, the voice signal of the left and right channel recorded on the magnetic tape through said processes is picked up at left

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and right heads and is output as the voice signals L6 and R6 through the audio processor 70 (col. 3, lines 23-27).

Kim does not teach or disclose inter alia, as recited in claim 23, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit. As such, claim 23 is patentable over Kim.

Claim 23 is patentable over Silverman et al. as Silverman et al. does not teach or disclose the elements as recited in claim 23.

Silverman et al. discloses an audio/video system with multi-language capabilities for encoding and decoding a video signal and a plurality of corresponding audio signals.

However, Silverman et al. does not disclose or teach or disclose, as recited in claim 23, inter alia, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit, including a demodulator for demodulating the digital signal to restore original signal; a signal processor for receiving the plurality of audio signals, extracting the indicating information, and separating at least one of the plurality of audio signals based on the extracted indicating information; and a controller coupled to the



signal processor, to compare presentation time information of the separated signal to a synchronizing signal generated from the controller, and thereby to control presentation time of the separated signal, wherein each sector corresponding to the plurality of audio signals are sequentially recorded on the medium between sectors of the video signal, and the controller controls the signal processor to reproduce the sector corresponding to the selected audio signal to output at least one of the plurality of audio signals in response to a user selection.

In contrast, Silverman et al. discloses an encoder means for receiving an input video signal, a first audio signal, and a plurality of second audio signals which correspond to the input video signal (col. 2, lines 1-5).

Silverman et al. does not teach or disclose, as recited in claim 23, inter alia, a device for reproducing a digital signal recorded on a medium, the digital signal including a video signal, a plurality of audio signals encoded into audio channels wherein each audio signal is composed of at least one sector of audio information, and indicating information located in front of the audio information for identifying each audio signal wherein each audio sector is interleaved as a predetermined unit. As such, claim 23 is patentable over Silverman et al.

For the above reasons, claim 23 is patentable over the art cited by the Examiner. Further, claims 24-27 are patentable based on their dependency on patentable claim 23. Claim 28 is patentable for the same reasons as asserted for claim 23. Claims 29-30 are patentable based on their dependency on patentable claim 28.

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.



Respectfully submitted,

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